Final

Site-Specific Safety and Health Plan Attachment
Site investigation at the Former Rifle Grenade Range North of Washington Ranges, Parcel 221Q-X

Fort McClellan
Calhoun County, Alabama
EPA ID No. AL7 210 020 562

Prepared for:

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Prepared by:

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Task Order CK10
Contract No. DACA21-96-D-0018
IT Project No. 796887

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Revision 1

This Site-Specific Safety and Health Plan must be used in conjunction with the Installation-Wide Safety and Health Plan, Fort McClellan, Alabama.

Site-Specific Safety and Health Plan Attachment Approval
Fort McClellan, Calhoun County, Alabama

I have read and approve this site-specific safety and health plan attachment for the site investigation at Former Rifle Grenade Range North of Washington Ranges, Parcel 221Q-X at Fort McClellan, Alabama, with respect to project hazards, regulatory requirements, and IT Corporation procedures.

_____

Jeanne Yacoub, PE — Date
Project Manager

_____

William J. Hetrick, CIH — Date
Health & Safety Manager

_____

Jeff Tarr — Date
Site Coordinator

Acknowledgements

The final approved version of this site-specific safety and health plan (SSHP) attachment for the site investigation at the Former Rifle Grenade Range North of Washington Ranges, Parcel 221Q-X at Fort McClellan, Alabama, has been provided to the site coordinator. I acknowledge my responsibility to provide the site coordinator with the equipment, materials, and qualified personnel to implement fully all safety requirements in this SSHP attachment. I will formally review this plan with the health and safety staff every 6 months until project completion.

_____ _____

Project Manager Date

I acknowledge receipt of this SSHP attachment from the project manager, and that it is my responsibility to explain its contents to all site personnel and cause these requirements to be fully implemented. Any change in conditions, scope of work, or other change that might affect worker safety requires me to notify the project manager and/or the health and safety manager.

_____ _____

Site Coordinator Date

Site-Specific Safety and Health Plan Acknowledgement Form

I have been informed of, and will abide by the procedures set forth in, this site-specific safety and health plan attachment for the activities at the Former Rifle Grenade Range North of Washington Ranges, Parcel 221Q-X at Fort McClellan, Calhoun County, Alabama.

Printed Name	***Signature***	***Representing***	***Date***

Fort McClellan Gate Hours

Baltzell Gate	Baltzell Road. Open 24 hours daily, 7 days a week.

Fort McClellan Project Emergency Contacts

Fire Department (on post)	911
Fire Department (off post)	(256) 237-3541
Ambulance (off post)	911
Regional Medical Center	(256) 235-5121
Military Police (SSG Busch)	(256) 848-5680, 848-4824
DOD Guard Force (Mr. Bolton)	(256) 848-5680, 848-4732
Anniston Police Department	(256) 238-1800
Chemical Agent Emergencies	(256) 820-7272
(Hank Hubbard, Huntsville COE UXO EODT)	cell phone (205) 994-2254 or 994-2269
UXO Emergencies	(256) 820-7272
(Hank Hubbard, Huntsville COE UXO EODT)	cell phone (205) 994-2254 or 994-2269
UXO Nonemergencies/Reporting Only (Ronald Levy)	(256) 848-3758
Baltzell Gate Guard Shack (Staffed 1600-0700 hours, Mon-Sun)	(256) 848-5693, 848-3821
National Response Center & Terrorist Hotline	(800) 424-8802
Poison Control Center	(800) 462-0800
EPA Region IV	(404) 562-8725
Ronald Levy, Chief, FTMC Environmental Management	(256) 848-3758
Ellis Pope, U.S. Army Corps of Engineers	(334) 690-3077
Jeanne Yacoub, IT Project Manager	(770) 663-1429
William Hetrick, IT H&S Manager	(865) 690-3211
Mike Moore, Fort McClellan Safety Officer	(256) 848-5433
Dr. Jerry Berke, IT Occupational Physician	(800) 350-4511

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See Attachment 1, List of Abbreviations and Acronyms, of the Site-Specific Field Sampling Plan Attachment contained in this binder.

1.0 Site Work Plan Summary

Project Objective. The objective of this investigation at Fort McClellan (FTMC), Calhoun County, Alabama is to collect and analyze samples at the Former Rifle Grenade Range North of Washington Ranges, Parcel 221Q-X.

Project Tasks

- Conduct a surface and near-surface unexploded ordnance (UXO) survey over all areas to be included in the sampling effort.
- Provide downhole UXO support for all intrusive drilling activity to determine the presence of potential downhole hazards.
- Collect surface soil samples, subsurface soil samples, surface water samples, and sediment samples.

Personnel Requirements. Up to ten employees. See Figure 1-1 for an organization chart.

Note: All personnel on this site shall have received training, informational programs, and medical surveillance as outlined in the installation-wide safety and health plan (SHP) for site investigations at FTMC, and be familiar with the requirements of this site-specific SHP (SSHP). This SSHP must be used in conjunction with the SHP, FTMC, Alabama.

2.0 Site Characterization and Analysis

2.1 Anticipated Hazards

The activity hazard analysis in Chapter 5.0 contains project-specific practices utilized to reduce or eliminate anticipated site hazards. The activity hazard analysis indicates specific chemical and physical hazards that may be present and encountered during each task from on-site operations. Below each task is a list of hazards and specific actions that will be taken to control the respective hazards. These control measures may include work practice controls, engineering controls, and/or use of appropriate personal protective equipment (PPE).

Former Rifle Grenade Range, Parcel 221Q-X, was used for the practice of rifle grenades. The range was identified by the 1946 Reservation Map and Plate 5 of the July 1999 FTMC archive search report maps. The FTMC archive search report states that this rifle grenade range was used during World War II and was abandoned by 1958. The search report also states that World War II vintage rifle grenades were found northeast of Range 19 on the south side of the service road. Direction of fire is believed to have been toward the southeast from a firing line that would have been established at the northeast end of the parcel. This firing arrangement would allow the ridge to the southeast to serve as a backstop for rifle grenade fire.

Table 2-1 contains the toxicological and physiological properties of chemicals anticipated or to be used at the Former Rifle Grenade Range, Parcel 221Q-X. Contaminants of concern at the area include lead and trinitrotoluene.

The possibility of UXO exists at the Former Rifle Grenade Range, Parcel 221Q-X; therefore, UXO surface sweeps and downhole surveys of soil borings will be required to support field activities at the Former Rifle Grenade Range. The surface sweeps and downhole surveys will be conducted to identify anomalies for the purposes of UXO avoidance.

2.2 General Site Information

Site Location. Former Rifle Grenade Range, Parcel 221Q-X, is a 5.23 acre area approximately 500 feet north of Former Range 19, Qualification Pistol Range, Parcel 75Q, and immediately south of the Former Skeet Range, Parcel 69Q, in the south-western portion of the Main Post. The parcel is bounded to the south, and divided by, a service road that connects to Iron Mountain Road. The area is heavily wooded and no standing structures currently exist at the site.

Duration of Planned Employee Activity. Employee activity duration is 2 months.

Pathways for Hazardous Substance Dispersion. Possible pathways for hazardous substances in the area are groundwater, surface water, sediment, and soils.

Site Topography. The overall elevation of Former Rifle Grenade Range, Parcel 221Q-X, ranges from about 840 to 940 feet mean sea level. The highest elevation is at what is believed to be the target area for the range. Shallow groundwater flow probably follows site topography, with movement toward the northeast. A surface drainage feature passes through this parcel, beginning at the southeastern-most corner of the parcel boundary and exiting the site to Skeet Range, Parcel 69Q.

3.0 Personal Protective Equipment

The work activities will begin in the following levels of protection. Also, a completed description of Level D, Modified Level D, and Level C PPE is provided.

Task	Initial Level of PPE
Staging equipment	Level D
Collecting samples	Modified Level D*

* Initial level will be raised to Level C or higher if air monitoring results for volatile organic compounds in the worker=s breathing zone (BZ) are greater than action levels.

Level D. The minimal level of protection that will be required of IT Corporation personnel at the site will be Level D. The following equipment will be used for Level D protection:

- Coveralls or work clothing
- Leather work gloves (when necessary)
- Steel-toed safety boots
- Safety glasses
- Hard hat
- Hearing protection (when working near/adjacent to operating equipment).

Note: UXO personnel should not wear hard hats and steel-toed shoes when engaged in ordnance operations unless a significant overhead hazard exists. Where overhead hazards exist, a chin strap will be worn with hard hats to prevent accidental failing of hard hat.

Modified Level D. The following equipment will be used for Level D-Modified protection:

- Permeable Tyvek, Kleenguard, or its equivalent
- Latex boot covers
- Nitrile or latex gloves under work gloves
- Steel-toed safety boots
- Safety glasses
- Hard hat
- Hearing protection (when working near/adjacent to operating equipment).

Note: In addition to modified Level D PPE, the operator of high-pressure water jetting equipment shall wear metatarsal guards for the legs and feet.

Note: UXO personnel should not wear hard hats and steel-toed shoes when engaged in ordnance operations unless a significant overhead hazard exists. Where overhead hazards exist, a chin strap will be worn with hard hats to prevent accidental falling of hard hat.

Level C. Level C protection will not be used unless air-monitoring data indicate the need for upgrade; however, the equipment shall be readily available on site. The following equipment will be used for Level C protection:

X National Institute of Occupational Safety and Health-approved full-face, air-purifying respirators equipped with organic vapor/acid gas/P100 cartridge

X Hooded, Saran-coated Tyvek, taped at gloves, boots, and respirator

X Nitrile gloves (outer)

X Latex or lightweight nitrile gloves (inner)

X Neoprene steel-toed boots or polyvinyl chloride overbooties/steel-toed safety boots

X Hard hat

X Hearing protection (when working near/adjacent to operating equipment)

Note: In addition to Level C PPE, the operator of high-pressure water jetting equipment shall wear metatarsal guards for the legs and feet.

4.0 Site Monitoring

The environmental contaminants of concern resulting from Former Rifle Grenade Range, Parcel 221Q-X operations are lead and trinitrotoluene. Table 4-1 contains action levels for site monitoring at the sites.

Chemical. Monitoring will be performed by the site safety and health officer during the performance of ground intrusive operations. A calibrated flame ionization detector (i.e., OVA 128 or equivalent) organic vapor analyzer will be utilized to monitor the sampling locations and breathing zones to determine if any organic material may be present that would necessitate upgrading of protection level. A calibrated combustible gas/oxygen indicator will be utilized to monitor the work areas and breathing zones to determine if any combustible/flammable oxygen levels may be present that would necessitate evacuation of the work area. Table 4-2 contains the air monitoring frequency and location for site monitoring at the work sites.

Unexploded Ordnance. UXO safety will be achieved by employing UXO specialists to ensure that field personnel do not come into contact with UXO. In areas where UXO is suspected to exist, the UXO specialists will perform the following UXO avoidance operations.

- X ***Area UXO Surveys Using Magnetometers.*** During this operation UXO on the surface will be detected and marked for avoidance during field operations. Metal objects just below the surface (within 2 feet) will also be marked to indicate the potential hazard.

- X ***Downhole UXO Surveys.*** UXO specialists will perform downhole magnetometer surveys to detect metal objects in the path of the boring apparatus until undisturbed soils are reached. The boring location will be moved if subsurface metal objects are detected.

If UXO is encountered, personnel will contact the site manager and UXO specialist immediately. Personnel will evacuate the immediate area and secure it.

5.0 Activity Hazard Analysis

The attached activity hazard analysis (Table 5-1) is provided for the following activities:

- X Setup of equipment and general field activities
- X Land survey
- X Soil, sediment, and water sampling.

All injuries and illnesses must be immediately reported to the site manager or the site safety and health officer, who will then notify off-site personnel and organizations as necessary.

If hospital care must be provided, the victim shall be treated at Northeast Regional Medical Center. Directions to the hospital are provided in Figure 5-1.